## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 16 December 2004 (16.12.2004)

**PCT** 

## (10) International Publication Number WO 2004/108757 A3

- (51) International Patent Classification<sup>7</sup>: C07K 14/00, 14/47, A01H 5/00, A61K 38/16, C12N 15/11, A61P 31/04, A23K 1/17, C11D 3/00, C07K 7/08
- (21) International Application Number:

PCT/DK2004/000399

- (22) International Filing Date: 10 June 2004 (10.06.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PA 2003 00865 11 June 2003 (11.06.2003) DK PA 2003 00924 20 June 2003 (20.06.2003) DK

- (71) Applicants (for all designated States except US): NOVOZYMES A/S [DK/DK]; Kroegshøjvej 36, DK-2880 Bagsvaerd (DK). UNIVERSITA' DEGLI STUDI DI TRIESTE [IT/IT]; Dipartemento di Biochimica, Via Giorgieri 1, I-34127 Trieste (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SEGURA, Dorotea, Raventos [ES/DK]; Ejlersvej 13, DK-3050 Humlebaek (DK). MYGIND, Per, Holse [DK/DK]; Soeborg Park Allé 60, DK-2860 Soeborg (DK). HOEGENHAUG, Hans-Henrik, Kristensen [DK/DK]; Kong Valdemarsvej 16, Soelleroed, DK-2840 Holte (DK). TOSSI, Alessandro [IT/IT]; Via L. Medeot 17, Farra D'Isonzo, I-34070 Gorizia (IT).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 7 July 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIMICROBIAL POLYPEPTIDES

(57) Abstract: The present invention relates to polypeptides having antimicrobial activity and polynucleotides having a nucleotide sequence which encodes for the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid constructs as well as methods for producing and using the polypeptides.

